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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,795	08/08/2005	Hugo De Vries	5100-000011/US	6854
30/593 7590 01/16/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
DENNIS, MICHAEL DAVID				
ART UNIT		PAPER NUMBER		
3711				
MAIL DATE		DELIVERY MODE		
01/16/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/522,795

**Applicant(s)**

DE VRIES ET AL.

**Examiner**

MICHAEL D. DENNIS

**Art Unit**

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

1. This action is made Final in response to applicants Amendments / Request for Reconsideration filed 12/5/08. Claims 15 and 17 are substantially amended; claims 15-25 are pending.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to what constitutes a low melting point.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-18 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Garcia.

As per claim 15, Garcia discloses a playable surface comprising a relatively hard substrate 14, at least one layer arranged thereon of a resilient and/or damping material 20, and a top layer 22 arranged in turn thereon, wherein air chambers 18 are formed in the relatively hard

substrate and/or resilient and/or damping layer during or after arranging of the substrate or layer respectively via compressed air using a compressed air mechanism (Fig. 2-3; column 2; Abstract). It is inherent to Garcia that the compressed air is pumped into the air chambers after arranging said layers because of the implementation of the exhaust tubes....or in other words, as air leaves the air chambers through the exhaust tubes the compressed air is pumped back into the air chambers in a cyclical format wherein this format continues after arranging the substrate or layer respectively.

As per claim 16, Garcia discloses wherein the air chambers take the form of recesses in the upper part of the relatively hard substrate and/or the layer of resilient and/or damping material (Fig.'s 2-3).

As per claim 18, Garcia discloses wherein the air chambers comprise spaces 26. It is noted that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (Fig.'s 3-4). See MPEP 2113.

As per claim 22, Garcia discloses wherein the top layer is synthetic turf (column 2).

As per claim 23, Garcia discloses an air flow device 26 connected to the air chambers for generating an air circulation therein (column 2).

5. Claims 15 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Magnuson et al.

As per claim 15, Magnuson et al. discloses a playable surface, comprising a relatively hard substrate 13, at least one layer arranged thereon of a resilient and/or damping material 11 and a top layer 10 arranged in turn thereon, wherein air chambers are formed in the relatively hard substrate and/or the layer of resilient and/or damping material (column 3, lines 14-26).

Clearly, from Figures 1 and 4, one can see how the layer of a resilient and/or damping material 11 forms air chambers during or after arranging the layer because the air chambers are defined by the contours of the resilient and/or damping material.

As per claim 20, Magnuson et al. discloses wherein a profiled mat 12 is arranged between the relatively hard substrate and the layer of resilient and /or damping material and over which the resilient and/or damping material is spread, and wherein the air chambers are defined by the profile of the mat (column 3, lines 14-26).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia in view of OFFICIAL NOTICE.

As per claim 19, Garcia discloses wherein the air chambers comprise intermediate spaces between a filler material 20 in the layer of resilient and/or damping material (Fig.'s 2-3) but does

not disclose expressly that the filler material comprises granules. However, OFFICIAL NOTICE is taken that such a feature as using a filler material comprising granules is well known in the art. Hence, at the time of invention, one of ordinary skill in the art would have found it obvious to use a filler material comprising granules in order to provide a cost effective, conforming, and stable filler that will perform the function of filling an unoccupied region.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia in view of Gunter.

As per claim 17, Garcia discloses wherein a profiled mat 22 is arranged on the layer of resilient and/or damping material, and wherein the air chambers 18 are defined by the profile of the map, wherein the air chambers are positioned up to the bottom profile of the mat 22 (Fig.'s 2-3). Garcia does not expressly disclose wherein the profile mat is formed from a biologically degradable material or from a material with a low melting point; however, Gunter discloses wherein such features as using bio degradable material for artificial surfaces are old and well known in the art (column 11, lines 55-60). Hence, at the time of invention, one having ordinary skill in the art would have found it obvious to modify the material in order to make it more environmentally friendly.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia in view of Gunter and further in view of Friedrich.

As per claim 21, Garcia does not disclose wherein heating wires are received in the mat; however, Friedrich discloses that such features as placing an electrical cable heating means below a playing surface is well known in the art (column 7, lines 1-25). Relocating the receiving portion of the heating wires to a mat portion does not substantiate the feature. Hence, at the time

of invention, one of ordinary skill in the art would have found it obvious to modify the playable surface discloses by Garcia with an electrical heating means as taught by Friedrich, as both Garcia and Friedrich are directed towards playable surfaces. The motivation to combine references is to provide a field capable of withstanding harsh weather elements (column 3, lines 27-30)

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Magnuson et al. in view of Friedrich.

As per claim 25, Magnuson et al. does not disclose wherein heating wires are received in the mat; however, Friedrich discloses that such features as placing an electrical cable heating means below a playing surface is well known in the art (column 7, lines 1-25). Relocating the receiving portion of the heating wires to a mat portion does not substantiate the feature. Hence, at the time of invention, one of ordinary skill in the art would have found it obvious to modify the playable surface discloses by Magnuson et al. with an electrical heating means as taught by Friedrich, as both Magnuson et al. and Friedrich are directed towards playable surfaces. The motivation to combine references is to provide a field capable of withstanding harsh weather elements (column 3, lines 27-30).

#### ***Response to Arguments***

11. Applicant's arguments filed 12/5/08 have been fully considered but they are not persuasive. Applicant argues wherein the air chambers are not formed in the relatively hard substrate and/or the layer of resilient and/or damping material as applied to both primary references Garcia and Magnuson et al. Examiner disagrees. Fig. 2 of Garcia teaches wherein the

air chambers are continuously filled with air...then exhausted....then filled with compressed air in a cyclical fashion, amongst (i.e. below and on the sides) the layer of resilient and/or damping material 20. Applicant has not set forth claim language to define the structural relationship between the air chambers and layer of resilient and/or damping material, save “in”. Per MPEP 2111, the Federal Circuit’s *en banc* decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the “broadest reasonable interpretation” standard: The Patent and Trademark Office (“PTO”) determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction “in light of the specification as it would be interpreted by one of ordinary skill in the art.” With respect to applied prior art of Magnuson et al., the air chambers are clearly arranged in the layer of resilient and/or damping material per Figures 1 and 4. Furthermore, applicant has not limited the scope of a resilient and/or damping material, and the examiner refers applicant to the offices stance on broad and reasonable claim interpretation.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL D. DENNIS whose telephone number is (571)270-3538. The examiner can normally be reached on 8:00 - 6:00 (off every other Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Eugene L. Kim can be reached on (571) 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD  
1/15/08  
/Gene Kim/  
Supervisory Patent Examiner, Art Unit 3711